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## PLASTIC CONTAINER

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6 Claims

## ABSTRACT OF THE DISCLOSURE

A plastic container having a body portion and a lid connected thereto is provided. The container has an integrally formed latch which permits the lid to be opened and closed easily with one hand.

In the marketing of goods which are relatively small in size, it is desirable that they be packaged in a container which is economical to manufacture and which is small enough to fit easily within a person's pocket or handbag. Furthermore, it is desirable that the package be provided with means for maintaining the lid in a closed position but which can easily be opened.

Accordingly, it is an object of the present invention to provide a container having a body portion and a lid in which latch means are provided for maintaining the lid closed on the body portion but which can readily be released to move the lid to an open position.

Another object of the present invention is to provide a container having an integral latch which can easily be released with one hand to open the lid thereof.

Other objects and advantages of the present invention will become readily apparent from the annexed sheet of drawings on which:

FIGURE 1 is a perspective view showing the container with the lid in a closed position on the body portion.

FIGURE 2 is a view similar to FIGURE 1 showing the lid in fully open position.

FIGURE 3 is a perspective view taken from another angle showing the lid in a partially open position.

FIGURE 4 is a sectional view taken along line 4—4 of FIGURE 1.

FIGURE 5 is a sectional view taken along line 5—5 of FIGURE 1.

FIGURE 6 is a sectional view taken along line 6—6 of FIGURE 1.

Referring now to the drawings, there is illustrated a container generally designated by the numeral 10 comprising a body portion 11 and a lid 12. The lid may be attached to the body portion by a pair of hinges 13 which are integrally molded therewith. However, other types of hinges may be utilized to connect the lid and body portions. One advantage of utilizing integrally molded hinges 13, in addition to the relatively low cost, lies in the fact that the lid 12 and body portion 11 may be molded with the lid in an open position and, hence, the elastic memory of the plastic will cause the lid to have a tendency to spring to an open position upon release of the latch.

The body portion 11 includes a bottom 16 and an integrally formed annular sidewall 17 extending upwardly therefrom. As shown, the sidewall 17 is formed with a plurality of planar wall portions 17a, 17b, 17c and 17d, which terminate at their upper ends in an outwardly extending flange 18. As illustrated, the hinges 13 extend outwardly from the flange 18 adjacent sidewall portion 17d. The portion of the flange 18 extending outwardly from the sidewall portion 17b opposite the hinges 13 is provided with a notch 19, for purposes to be hereinafter described.

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The lid 12 includes a panel portion 21 which terminates at its outer periphery in edge portions 22 which overlie the flange 18 when the lid is in a closed position. Extending downwardly from the inside of the panel 21 is a rib 23 having a size and position to be snugly received within the top of the sidewall 17 when the lid is in a closed position. Thus, when the lid 12 is closed, the rib 23 engages the top of each of the sidewall portions 17a, 17b, 17c, and 17d, and serves to impart a degree of rigidity to the container 10. It will be noted, however, from viewing FIGURE 2, that the rib 23 is interrupted as at 24 over a substantial portion of the edge which is opposite the hinges 13. Preferably, the interruption of the rib 23 extends over a greater distance than does the notch 19 of the flange 18 and is so positioned that no portion of the rib 23 is aligned with the notch 19 when the lid is in a closed position.

Integrally formed with the lid 12 and extending downwardly from the edge portion 22 opposite the hinges 13 is a tab 25. The tab 25 has an upper or first portion 25a which is receivable within the notch 10 of flange 18 and a lower or second portion 25b which extends laterally beyond the notch 19 and engages the under surface of the flange 18 adjacent the notch 19 when the lid is in a closed position. Thus, the lid 12 is retained in a closed position on the body portion 11 by virtue of the lower tab portion 25b engaging the portions of the flange 18 adjacent the notch 19.

It will be readily seen that such construction will permit the tab 25 to be released from the flange 18 by simply pushing the sidewall portion 17b inwardly a sufficient distance that the flange portions 18 adjacent the notch 19 are moved out of engagement with the lower tab portions 25b. The fact that the flange 18 has a notch 19 in the area of the sidewall portion 17b permits the top of such sidewall portion to be readily deflected inwardly. Thus, a user can open the package simply by holding the sidewall portion 17d adjacent the hinges with his fingers and pushing inwardly on the sidewall portion 17b with his thumb. The fact that the rib 23 is also interrupted in this area as indicated by the numeral 24 makes it possible to perform the opening action quite readily. And yet, experience has shown that the container has a remarkable ability to remain in a closed position unless a person actually intends to open it.

Upon release of the latch or tab 25, the lid 12 will immediately spring to an open position by virtue of the elastic memory inherent in plastic material and the fact that the hinges 13 were initially molded with the lid in an open position. However, it is obviously possible to utilize a separate spring loaded hinge without affecting the operability of the tab closing means.

Although the present invention has been described and illustrated as having a rectangular cross-sectional configuration with a rectangular lid, it will be recognized that many shapes of containers may utilize the present invention.

I claim:

1. A container comprising

- (a) a body portion having a bottom and an annular sidewall extending upwardly therefrom, said sidewall terminating at its upper end in an outwardly extending flange, said flange having an interrupted portion defining a notch,
- (b) a lid for closing the upper end of said body portion, said lid, when closed, overlying said flange,
- (c) a tab extending downwardly from said lid in alignment with said notch, said tab having a first portion receivable within said notch and a second portion extending laterally beyond said notch and en-